Neotypification of *Agropyron deweyi* (Poaceae, Triticeae)

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ABSTRACT. As part of a revision of the genus, *Agropyron deweyi* Á. Löve (Poaceae, Triticeae) is neotypified, because its holotype grown from seed material from Turkey was lost. The neotype is selected from one of two specimens bearing the same wild-origin seed details as the original type, which differ in the date of their collection.

Key words: *Agropyron*, Poaceae, Triticeae.

The genus *Agropyron* Gaertner according to Löve (1984) contains one haplome, designated as P, and consists of taxa that are diploids, autotetraploids, and autohexaploids with genomes PP, PPPP, and PPPPPP, respectively. Tzvelev (1976) recognized 10 species in the genus, whereas Löve (1984) recognized three based on the three ploidy levels: *A. pectiniforme* Roemer & Schultes ($2n = 14$), *A. cristatum* (L.) Gaertner ($2n = 28$), and *A. deweyi* Á. Löve ($2n = 42$).

Löve (1984: 432) described *Agropyron deweyi* from a specimen "Grown from seeds from 32 miles east of Van, Turkey, on a rocky slope at 2100 feet, collected on August 27, 1948, by J. R. Harlan, U.S. Department of Agriculture, Introduction Service, No. PI 173622, CS-3-87, cultivated at Evans Farm, Cache County, Utah, U.S.A., specimen collected on June 28, 1979, by Douglas R. Dewey. Type in UTC, Logan, Utah, U.S.A." An extensive search for the type by the curator of UTC failed to reveal this type, and it is therefore considered to be lost. It is also worth noting that the tetraploid *A. cristatum* cannot be distinguished in outward appearance from the hexaploid *A. deweyi*. After the curator was asked to search for hexaploid specimens, two specimens labeled "*A. cristatum*" and annotated "$2n = 42$" with almost the same label as the one quoted by Löve were found; however, these specimens have a collection date of 30 June 1982 (vs. the protologue date 28 June 1979) and different CS numbers (CS-2-31 and CS-3-44), and the collectors are C. Nowak & D. R. Dewey (vs. Dewey). There is thus a strong possibility that the holotype was lost. The search by the curator also uncovered five specimens annotated in print by Dewey "$2n = 42$" and also labeled "*A. cristatum*" by Dewey, who considered these specimens including the type by Löve to be no more than chromosomal variants of the tetraploid *A. cristatum* (see below under Selected specimens).

Although these were collected prior to the publication of *Agropyron deweyi*, they were not cited by Löve in the protologue, and there is no evidence that he ever saw them (Löve was working from his home in California by 1983). Consequently, we do not consider these eligible as lectotype specimens according to the *International Code of Botanical Nomenclature* (McNeill et al., 2006), and hence neotypification is necessary. The obvious choice of neotype is one of two specimens with identical collection number (PI 173622) to the type indicated by Löve but collected in June 1982.

Agropyron deweyi Á. Löve, Feddes Repert. 95: 432. 1984. *Agropyron cristatum* (L.) Gaertner subsp. *incanum* (Nábělek) Melderis, Notes Roy. Bot. Gard. Edinburgh 42: 77. 1984. *Agropyron incanum* (Nábělek) Tzvelev, Bot. Zhurn. (Moscow & Leningrad) 78: 88. 1993. TYPE: [Turkey (Love, 1984).] Grown at Evans Farm, Utah State Univ. USDA-ARS Grass Plots, Cache Co., Utah, 30 June 1982, *PI 173622, CS-2-31*; *C. Nowak & D. R. Dewey s.n.* (neotype, designated here, UTC 176336; duplicate of neotype, UTC 179536). Figure 1.

Distribution. *Agropyron deweyi* is found in eastern Turkey and western Iran.

Selected specimens. "Grown at Paradise Farm, Utah State University USDA-ARS Grass Plots. Cache County, Utah," all collected on 5 July 1983 by T.

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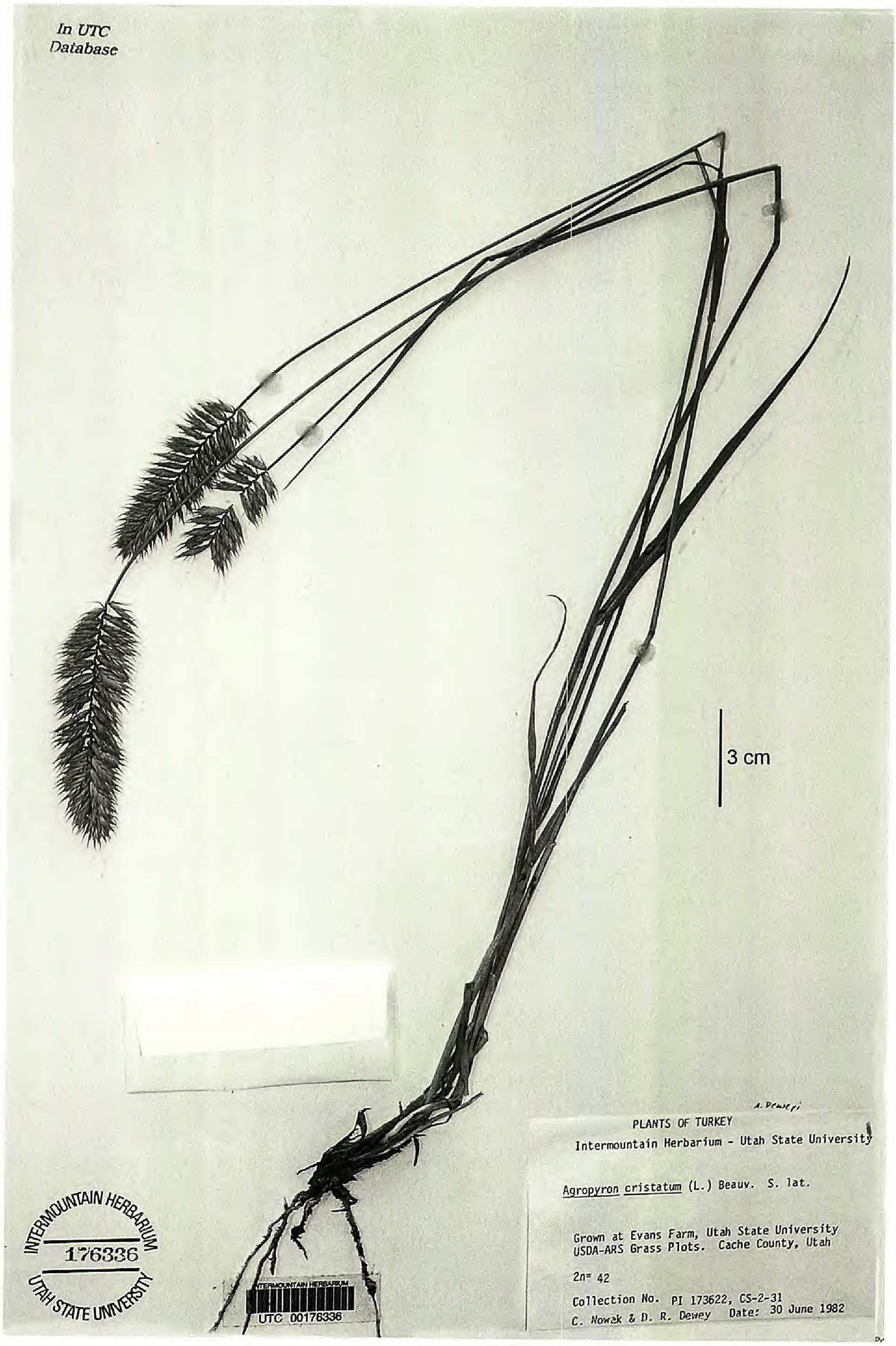

Figure 1. Photograph of the neotype of *Agropyron deweyi* Á. Löve (UTC 176336).

Stockton & D. R. Dewey. Their collection numbers differ: "PI 401083; PE-5-41"; "PI 401084; PE-5-51"; "PI 401085; PE-5-62"; "PI 380621; PE-15-21"; and "PI 406442; PE-7-23." The first four originated from seed material collected in Iran and the fifth from the former U.S.S.R. A search in GRIN (Germplasm Resources Information Network at the United States Department of Agriculture, Agricultural Research Service, Beltsville, Maryland, U.S.A., <http://www.ars-grin.gov/>) revealed that the first three originated

from seed material collected in "Bazargan, at the Iran–Turkey border on a dry hillside just inside Iran. Elevation: 1600 meters" by Dewey. The fourth is from seed material collected by Schwendiman in "Mako, near Iran–Turkey border. Limestone hillside," and the fifth was received from the collection of the N. I. Vavilov Institute of Plant Industry, now St. Petersburg, Russia.

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